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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/735,482	12/12/2003	Georg Neumann	021756-003500US	2477	
	7590 07/28/2008 NSEND AND TOWNSEND AND CREW LLP			EXAMINER	
TWO EMBARCADERO CENTER 8TH FLOOR SAN FRANCISCO, CA 94111-3834			MITCHELL, JASON D		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/735,482	NEUMANN ET AL.
Office Action Summary	Examiner	Art Unit
	Jason Mitchell	2193
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>09 Jac</u> This action is <b>FINAL</b> . 2b) ☑ This 3) ☐ Since this application is in condition for alloward closed in accordance with the practice under <u>Backets</u> .	s action is non-final.  nce except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) 1,4-43 and 45-50 is/are pending in the 4a) Of the above claim(s) is/are withdrays 5)  Claim(s) is/are allowed.  6)  Claim(s) 1,4-43 and 45-50 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or subject to restriction and/or subject to restriction.	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	cepted or b) objected to by the liderawing(s) be held in abeyance. See tion is required if the drawing(s) is objected.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal F 6)  Other:	ate

## **DETAILED ACTION**

This action is in response to a request for continued examination filed on 7/9/08.

Claims 1, 4-43 and 45-50 are pending in this application.

## Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-18, 20-43 and 45-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Java <sup>tm</sup> 2 Platform, Standard Edition v1.2.2 API Specification" (Java SE) in view of "Specification-based Testing for GUI-based Applications" by Chen et al. (Chen) and further in view of US 7,171,588 to Friedman et al. (Friedman).

Regarding Claims 1, 36, 38-39, and 45: Java SE discloses:

determining a cursor position (Interface AccessibleComponent, pg. 1, getAccessibleAt(Point p)");

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ascertaining, based on the cursor position, an accessibility context associated with the cursor position (Interface AccessibleComponent, pg. 1, getAccessibleAt(Point p)";

identifying a component by reference to the accessibility context (Class AccessibleContext pg. 3 "getAccessibleComponent()"), wherein the accessibility context has an accessibility role (Class AccessibleContext pg. 3 "getAccessibleRole()") that defines a set of properties, including at least one program method, associated with the accessibility context (Class AccessibleContext pg. 3 "getAccessibleAction()"), wherein the identified component comprises the set of properties (e.g. Interface AccessibleComponent pg. 2 "getFont ()"; "setFont()");

searching a component hierarchy for an object having an accessibility context matching the accessibility context (Class AccessibleContext pg. 3 "getAccessibleComponent()"); and

playing back an event (Interface AccessibleAction pg. 1 "doAccessibleAction(int I)").

Java SE does not explicitly disclose recording and retrieving an identified accessibility context, prior to 'playing back' an event based on the identified, stored and retrieved context.

Chen teaches recording, in real time, an identified event (pg. 207, Section 2 "record all the interesting events ... records every point and click applied to the GUI application");

retrieving the stored event (pg. 207 "repeated with the recorded test scripts"; this requires retrieving the stored event); and

playing back the stored event (pg. 207 "automatically repeated with the recorded test scripts") for testing purposes (Title "Testing for GUI-Based Applications").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the 'Capture/Replay' testing methodology taught by Chen with the accessibility tools disclosed in Java SE. Those of ordinary skill in the art would have been motivated to do so in order to provide an environment to test accessible, GUI-based applications (Chen Abstract "automate effective testing for applications with complicated graphical user interactions."). Such a modification would have been within the ability of one of ordinary skill and would have produced only the expected results (i.e. a testing environment as in Chen accessing the GUI interface using the Java SE objects).

The Java SE-Chen combination does not explicitly teach operation independent of an operating system

Friedman teaches that Java executes independent of an the operating system (see e.g. col. 2, lines 12-16 "JAVA programming language ... provides "platform independence" ... an application is intended to perform the same regardless of the hardware and operating system on which it is operating").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the functionality of the Java SE-Chen combination in the JAVA language. Specifically, by implementing the testing environment disclosed by Chen (pg. 207, section 2 "the Capture/Replay technique") in the JAVA language and making use of the Java SE object (e.g. Interface AccessibleComponent, pg. 1, getAccessibleAt(Point p)") to obtain the 'event' data to be recorded. Those of ordinary skill in the art would have been motivated to do so in order to achieve the platform independence provided by the JAVA language (Friedman col. 2, lines 12-16 "JAVA programming language ... provides "platform independence"").

**Regarding Claim 4:** Java SE discloses the object comprises the set of properties, including the at least one program method, defined by the accessibility role (e.g. Interface AccessibleComponent pp 1-3, Method Summary).

Regarding Claims 5-12, 40-42: Java SE discloses responding to the claimed triggering events (e.g. Class Event and Class EventListener). Further in regard to claims 7 and 12, Java SE discloses executing program method a first or second time (Interface AccessibleAction pg. 1 "doAccessibleAction(int I)").

**Regarding Claim 13-18 and 37:** The claims recite recording and subsequently modifying records. Java SE does not explicitly disclose this.

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Chen teaches recording GUI actions and modifying the created records (pg. 207, Section 2 "a Capture/Replay tool is used to record all the interesting events ... edit the recorded test script").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the 'Capture/Replay' testing methodology taught by Chen with the accessibility tools disclosed in Java SE in order to provide an environment to test accessible, GUI-based applications (Chen Abstract "how to automate effective testing for applications with complicated graphical user interactions.").

**Regarding Claims 20-26:** The claims recite various known GUI elements that Java SE discloses are implementable as AccessableComponents (Interface AccessibleComponent pg. 1, "any object that is rendered on the screen").

**Regarding Claim 27:** Java SE disclose the action of formatting a portion of text (Interface AccessibleComponent, pg. 2 "setFont()")

**Regarding Claims 28-30:** The claims recite iterating over the steps of claim 1. Chen teaches applying the "Capture/Replay" tool to all actions (pg. 207, Section 2 "a Capture/Replay tool is used to record all the interesting events").

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of claim 1 iteratively in so as to "to record all the interesting events" (Chen pg. 207, Section 2).

Regarding Claims 31-35, 43: The claims recite standard testing and analysis functionality as taught by Chen. Further, regarding claim 35, it would have been obvious to test the application for accessibility as claimed (Java SE Interface AccessibleComponent "determine if an object supports the AccessibleComponent interface")

**Regarding Claim 46:** The claim recites the limitations of claim 1 except wherein the 'replaying' is analyzing the applications accessibility. This limitation has been addressed in the rejection of claim 35.

Regarding Claim 47: See the rejection of claim 12.

**Regarding Claims 48-50:** See the rejection of claims 31-35.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Java tm 2 Platform, Standard Edition v1.2.2 API Specification" (Java SE) in view of "Specification-based Testing for GUI-based Applications" by Chen et al. (Chen) in

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view of US 7,171,588 to Friedman et al. (Friedman) and further in view of US 2002/0188613 to Chakraborty et al. (Chakraborty).

**Regarding Claim 19:** The Java SE-Chen-Friedman combination does not explicitly disclose storing the records in an XML file.

Chakraborty teaches storing data in an XML file (par. [0019] "data is XML stored in flat files")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the records retrieved by the Java SE-Chen-Friedman system in XML as taught by Chakraborty (e.g. par. [0019]). Those of ordinary skill would have been motivated to do so in order to provide platform independence to the data storage mechanism (Chakraborty par. [0019] "XML stored in flat files ... helps the user read, edit and delete application data through a pure application program interface ... such as the Java API")

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bullock Lewis can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/ Jason Mitchell 7/25/08